

Appn. Number 10/599,178 (Palacios) GAU 2169

Amnt. A contd.

5 of 29

CLAIMS: The following is a listing of all claims in the application with their status and the text of all active claims.

1. (CURRENTLY AMENDED) A system for managing calculation expressions, comprising:
 - (a) memory means, for storing information about said calculation expressions;
 - (b) processing means, for modifying the content or form of said calculation expressions;
 - (c) means for receiving external input; and
 - (d) means for showing one or more arboreal graphical representations;
wherein an arboreal graphical representation is an entity that shows a calculation expression in the form of a tree, [and wherein there might exist different types of arboreal graphical representations.] and for said arboreal graphical representation, one or more of its nodes show an intermediate subexpression, wherein said intermediate subexpression can be a regular intermediate subexpression or can be an introduced intermediate subexpression.
2. (CURRENTLY AMENDED) A system as claimed in claim 1, further comprising means for editing said one or more arboreal graphical representations, wherein said editing [might comprise] comprises one or more of the following actions: (1) creating after blank situation, (2) modifying, (3) creating after blank situation and modifying. [, (4) another type of action.]
3. (DELETED)

Appn. Number 10/599,178 (Palacios) GAU 2169

Amnt. A contd.

6 of 29

4. (ORIGINAL) A system as claimed in claim 1, wherein one of said graphical representations is a TOWER STRUCTURE, wherein said tower structure is characterized by the following:
 - (a) the nodes of the tree are arranged in vertical fashion, some nodes being located over other nodes, and
 - (b) said system comprises means to indicate which nodes are the parent of which nodes.
5. (ORIGINAL) A system as claimed in claim 1, wherein one of said graphical representations is a VERTICAL STRUCTURE, wherein said vertical structure is characterized by the following:
 - (a) the nodes of the tree expand in vertical fashion, so that if a node is at a given position, its child nodes are located at a lower position, and
 - (b) it comprises means for indicating which nodes are the parents of which nodes.
6. (ORIGINAL) A system as claimed in claim 1, wherein one of said arboreal graphical representations is an ESCALATOR STRUCTURE, wherein said escalator structure is characterized by the following:
 - (a) the nodes of the tree are arranged in different levels of a table, and certain nodes are only visible in certain levels of the table, so that the expression is read by changing levels in the positions where the transitions between nodes take place, and
 - (b) there might exist a summary cell that contains the total expression.
7. (ORIGINAL) A system as claimed in claim 1, wherein one of said arboreal graphical representations is a HORIZONTAL STRUCTURE, wherein said horizontal structure is characterized by the following:
 - (a) the nodes of the tree expand in horizontal direction, so that a parent node has a different horizontal position than its child nodes, and
 - (b) said system comprises means for indicating which nodes are the parents of which nodes.

Appn. Number 10/599,178 (Palacios) GAU 2169

Amnt. A contd.

7 of 29

8. (DELETED)

9. (DELETED)

10. (ORIGINAL) A system as claimed in claim 1, further comprising means for applying the feature of GROUPING OF PEERS, which is characterized because said system imposes the condition that the operators that link different sister nodes have the same type.

11. (ORIGINAL) A system as claimed in claim 1, further comprising means for applying the feature of SEQUENCIATION OF NON ASSOCIATIVE OPERATORS, which is characterized by the fact that the system imposes the obligation that the operators that join sister nodes must satisfy the associative property.

12. (PREVIOUSLY PRESENTED) A system as claimed in claim 1, further comprising means for applying the functionality of EXPLICATIVE TEXT, whereby a descriptive text is associated to one or more of the nodes of said graphical representations.

13. (DELETED)

14. (DELETED)

15. (DELETED)

16. (ORIGINAL) A system as claimed in claim 1, further comprising means for expanding and collapsing nodes in said arboreal graphical structures.

17. (DELETED)

18. (DELETED)

Appn. Number 10/599,178 (Palacios) GAU 2169

Amnt. A contd.

8 of 29

19. (CURRENTLY AMENDED) A method for managing calculation expressions, comprising the following steps:

(a) creating one or more arboreal graphical structures,
(b) showing said one or more arboreal graphical representations to the user, wherein an arboreal graphical representation is an entity that shows a calculation expression in the form of a tree, ~~[and wherein there might exist different types of arboreal graphical representations.] and for said arboreal graphical representation, one or more of its nodes show an intermediate subexpression, wherein said intermediate subexpression can be a regular intermediate subexpression or can be an introduced intermediate subexpression.~~

20. (CURRENTLY AMENDED) A method as claimed in claim 19, further comprising the step of editing said one or more arboreal graphical representations, wherein said editing ~~[might comprise]~~ comprises one or more of the following actions: (1) creating after blank situation, (2) modifying, (3) creating after blank situation and modifying. ~~, (4) another type of action.]~~

21. (DELETED)

22. (ORIGINAL) A method as claimed in claim 19, wherein one of said graphical representations is a TOWER STRUCTURE, wherein said tower structure is defined in claim 4.

23. (ORIGINAL) A method as claimed in claim 19, wherein one of said graphical representations is a VERTICAL STRUCTURE, wherein said vertical structure is defined in claim 5.

24. (ORIGINAL) A method as claimed in claim 19, wherein one of said arboreal graphical representations is an ESCALATOR STRUCTURE, wherein said escalator structure is defined in claim 6.

Appn. Number 10/599,178 (Palacios) GAU 2169

Amnt. A contd.

9 of 29

25. (DELETED)

26. (DELETED)

27. (DELETED)

28. (DELETED)

29. (DELETED)

30. (ORIGINAL) A method as claimed in claim 19, further comprising the step of applying the functionality of EXPLICATIVE TEXT, wherein said functionality is described in claim 12.

31. (DELETED)

32. (DELETED)

33. (DELETED)

34. (DELETED)

35. (DELETED)

36. (DELETED)

37. (DELETED).

38. (DELETED)

Appn. Number 10/599,178 (Palacios) GAU 2169

Amnt. A contd.

10 of 29

39. (DELETED)

40. (CURRENTLY AMENDED) A system as claimed in claim 1, further comprising means for applying the functionality of PARTIAL RESULTS, where said functionality is characterized by the following:

(a) for one or more nodes, it shows a value that is associated to said node or nodes, wherein said value depends on the evaluation of said expression for said node or nodes.[,-and]

41. (PREVIOUSLY PRESENTED) A system as claimed in claim 1, further comprising means for converting said calculation expression into other type of entities, such as for example formulae for environments such as spreadsheet applications, search strings for database applications or Internet search engines or other types of entities.

42. (PREVIOUSLY PRESENTED) A method as claimed in claim 19, further comprising the step of applying the functionality of PARTIAL RESULTS, where such functionality is defined in claim 40.

43. (CURRENTLY AMENDED) A computer program that, when executed by one or more processors of a computer, allows said one or more processors to perform the steps of the method of claim 19. [the following steps:

(a) creating one or more arboreal graphical structures;
(b) showing said one or more arboreal graphical structures to the user,
~~wherein an arboreal graphical representation is an entity that shows a calculation expression in the form of a tree, and wherein there might exist different types of arboreal graphical representations.]~~

Appn. Number 10/599,178 (Palacios) GAU 2169

Amnt. A contd.

11 of 29

44. (CURRENTLY AMENDED) A computer readable medium containing computer executable instructions that, when executed by one or more processors of a computer, allows said one or more processors to perform the steps of the method of claim 19. [the following steps:

- (a) ~~creating one or more arboreal graphical structures;~~
- (b) ~~showing said one or more arboreal graphical structures to the user,~~
~~wherein an arboreal graphical representation is an entity that shows a calculation expression in the form of a tree. [tree, and wherein there might exist different types of arboreal graphical representations.]~~